



IEN Technical Advisory Committee

September 1, 2009

Meeting Minutes

(approved by committee October 14, 2009)

The September 1, 2009 meeting of the IEN Technical Advisory Committee was held in the Barbara Morgan Room, LBJ Building, 650 West State Street, Boise, Idaho.

ATTENDANCE

Members/Alternates Present:

Jerry Reininger Chair, Meridian School District
Greg Zickau (Co-Chair), Office of the CIO
Randy Gaines, ISU (*via VTC*)
Ann Joslin, Commission for Libraries
Brady Kraft, Idaho Education Network
Jerry Piper, Cambridge Telephone Co. / Idaho Telecom Alliance
Chris Rapp, alternate for Ryan Gravette, Idaho Digital Learning Academy

Others Present:

Sally Brevick, Office of the CIO	Jay Power, ENA (<i>via VTC</i>)
Mike Byers, ENA (<i>via VTC</i>)	Lenny Simpson, ENA
Matt Hultman, Tandberg (<i>via VTC</i>)	Joel Strickler, Qwest
Jodi McCrosky, Qwest	Jimmy Takata, Dept. of Education
Keith Murphy, Qwest	Mike Vance, ENA

WELCOME

Jerry Reininger welcomed everyone and introductions were made by those attending in person and by VTC.

APPROVAL OF PREVIOUS MEETING MINUTES

MOTION: Ann Joslin moved and Jerry Piper seconded a motion to approve the minutes of the meeting held on July 7, 2009; the motion passed unanimously.

IMPLEMENTATION UPDATE

IEN Architecture update

Jay Power from ENA explained that there is a delay in bringing a circuit to the proposed Boise location and ENA is therefore currently using their Chicago location which is in the same facility as Qwest's MPLS (Multiprotocol Label Switching) network. This is a carrier-grade facility that ENA has occupied for years and from which they can connect easily to the Qwest network – connectivity should be complete within the next few days. For connections between school districts, traffic will remain local on the Qwest core network without having to travel to the internet. If there *is* traffic over the internet, that connection will be made via the Chicago facility.

Questions and Discussion

Greg queried how long the current configuration would last. Jay said it was his understanding that Qwest had estimated a 120 day delay and Joel confirmed that this was due to a connection having to be made across the New York Canal which requires permits, however this should not impact users technically.

Brady questioned whether it had always been Qwest's intention to use this site and whether it had been known from the beginning that there would be a delay. Joel explained that two options had been considered and this one was felt, by Qwest and ENA, to be the better. Joel added that the initial information associated with the actual POP had been inaccurate and, in working through the design, it was realized that the circuit needed to be positioned on the other side of the canal. At that point an alternative arrangement was made. In the short term, it will be less costly to the IEN to deliver to the Chicago site. Qwest and ENA will take direction from this committee as to whether this is the best site, or even whether to maintain the Chicago arrangement in the long term. Joel confirmed that internet access for schools connecting to the IEN would be transparent going through Chicago.

It has been the long term IEN strategy to have two access points geographically dispersed, there again, there are a number of options that the vendor partners can provide to the Technical Advisory Committee. Brady commented that a recommendation about the first and second internet access points would be put before this committee at a future meeting.

Brady noted that a number of the higher education institutions currently deliver content to the IEN via the internet and he queried whether the internet access in Chicago would affect this. Joel did not perceive this to be an issue. There is 500Mb of bandwidth being provided to the IEN so the 1a and 1b schools would have more than enough and the excess would most likely be shared by the higher education institutions without any impact. Jay added that the Boise location would provide peering access with these institutions which is currently not available through the Chicago connection, this was not believed to be a problem in the short term, but this was part of the reason for moving into a Boise location.

Randy Gaines commented that ISU has a robust Internet 2 connection and peering would provide a better chance of success. Randy expressed the hope that in the future the IEN would provide a connection with the universities, and if not, then the universities would have to consider whether to pay for a direct connection themselves or remain with Internet 2. Jerry Reininger reminded the committee that E-Rate only reimburses K-12. Greg advised that a subsidized connection to the universities had not been considered in the budgeting process. It was felt that most of the universities had a robust connection and a connection to the IEN would not be necessary, if it did prove necessary in the future then that would be new information to consider.

Connectivity Update – Qwest

Joel provided a broad overview of the status of the initial schools:

Cottonwood: deployed.

West Side: "network-ready", Qwest and ENA are establishing a timeline for onsite visits and deployment of the router to support the circuits that have been established.

Clark: target date is September 8 for circuit availability.

Shoshone: "network-ready"

Boundary and Lake Pend Oreille: a significant middle mile build out was required to support high bandwidth services in the Coeur d'Alene area. Qwest has finished this upgrade to support the last mile high bandwidth connectivity that requires fiber optic installs for both of those schools. Both of those schools are on their final assessment phases.

Bear Lake: Fiber needs to be deployed to establish services.

Emmet and Jerome: there are existing fiber optics into these facilities and "network ready" status is set for September 2.

Weiser: similar to Bear Lake, need fiber optics deployed to support the services deployed to Weiser and there is a meeting today to establish parameters around deployment of services.

Mountain View: another fiber optic build required, date will be determined by the end of the week.

Grangeville: fiber optics required, with 240ft boring under an access road.

Chicago: already discussed, should have service up at the end of this week.

Salmon: fiber and connectivity is in place, will be ready 5 or 6 business days after testing.

Once Qwest and ENA have established that the Chicago site is ready for traffic, these end sites will be turned up and considered live, they will then be presented to Brady and others for acceptance. Those sites that do not require fiber builds have been deployed quite quickly and in a fashion that will hopefully be duplicated moving forward. In many cases there are infrastructure upgrades that would never have occurred if this type of network was not being deployed. Some of the network augmentations can help future-proof deployment timeframes.

Questions and Discussion

Jerry Piper questioned whether fiber was being installed where fiber already exists. Joel commented that it is possible, in almost every case, to re-use fiber-based facilities (where present) to provision services into a location. However, an alternative will be considered if

- 1) a local provider will not enter into an agreement to provision services;
- 2) or the existing fiber infrastructure cannot support the type of bandwidth required.

Typically, most of this can be solved by electronics but existing fiber will be utilized where it is available. To date, there have not been any instances where a provider has not wanted to enter into an agreement, it is normally mutually beneficial for providers to work together.

It was confirmed that fiber is being laid for 6 of the initial 12 schools. Brady commented that this ratio will not occur for every phase. As part of the selection process for Phase 1a, consideration had been given to the most remote and least connected schools in order for the initial success to be that much greater. Jerry Reininger noted that some communities had previously been unable to obtain additional fiber as a business case to do so could not be built, so the IEN project was going to help communities and local telecoms as well, creating a better infrastructure throughout the state. Chris Rapp noted that IDLA is on track to increase enrolments this year by another 30-40% and the increased connectivity would benefit students.

Joel referred to a success story regarding Bonners Ferry and Sandpoint (the same story was reported to the IT Resource Management Council on August 26.). Most of the IP traffic moves to the rest of the world from a point in Coeur d'Alene and then through Spokane. Previously an under-served region, the capacity between Spokane and Coeur d'Alene was insufficient for the increased traffic anticipated from the services required to be deployed to the schools. This generated an infrastructure build-out by Verizon, paid for by Qwest and at no cost to the IEN, more than tripling the bandwidth capacity between Coeur d'Alene and Spokane and benefitting not only the schools, but the entire community. Similar successes are expected elsewhere.

Jerry Reininger queried how this and other success stories would be fed back to the legislature. Greg advised that IEN staff as well as the Dept. of Administration Chief of Staff, Superintendent Luna and Director Gwartney would be armed with key talking points and examples just like this which powerfully illustrate the benefits of the IEN. Also, the Technical Plan, provided as part of the E-Rate process, will be updated and a version made specifically for the legislature, as was done last year. A suggestion has been made by the Geospatial Information Officer in the Office of the CIO, about mapping the origination and delivery of content through a GIS application and the resulting graphic shared the legislature.

Brady noted that there have also been offers of contributions from ENA and Tandberg. ENA has a public relations and marketing group that is collecting data and working on press releases, webinars and distributing

information. Tandberg has offered to provide a professional writer and staff who are going to “adopt” some teachers and students and create a success story publication that tracks the success from a personal level.

VTC Update

A goal had been set at the beginning of the IEN process that on September 1, 12 schools would be connected with video teleconferencing and would be sending and/or receiving classes. Brady reported that all 12 sites have VTC systems installed, they have been tested, and teacher training has been conducted. The following classes are being shared:

	Offered by	Received by
Calculus	Eagle High School	Rocky Mountain
Latin	Eagle High School	Rocky Mountain
Psychology (dual credit)	Emmett High School	Weiser
Holocaust Literature	Weiser	Emmett (Shoshone interested)
Two classes	CSI	Regular schedule + high schools
Two classes	CSI (adjusting schedule to suit the high schools)	Just for high schools

ISU and CWI have an online survey which will be provided through the IEN. ISU and CWI are interfacing with economic development groups as well as chambers of commerce and sending these surveys to all community members so that they can respond with the types of classes they would like. The POST Academy has committed to having two police officer training classes in the fall semester.

Brady noted that the delay regarding some of the fiber installation had provided an obstacle that could not be overcome within the first 60 days, however the schools would not notice the difference and, from an intent standpoint, all the goals for Phase 1a had been met. There have been discussion about defining the status “complete” and checklists of actions have been created in order to certify that a school is actually on the IEN. Within a week or 10 days, the first school will be certified and the next two or three should follow within hours.

Some of the systems in Phase 1b are described as being “under review”. In this regard, Brady explained that, as a steward of the State’s funds, the IEN staff undertake a rigorous reviewing process for all of the schools before committing to spending money. Consideration is given to the architecture, Qwest’s proposed connectivity, bandwidth needs and education desires, interfacing with local carriers, and cost justification. If a school is likely to cause a delay in reaching a goal, then it is possible to move it into the subsequent phase and bring another school in sooner.

Questions and Discussion

Jerry Piper raised a question about whether a student participating in a class by VTC will be added to the roll count of the originating school. Jerry Reininger advised that this was an issue currently being considered within the Dept. of Education and there was no answer at this time.

Brady commented that Superintendent Luna was working on creating a policy that would motivate teachers to want to deliver content and motivate districts to want their students to participate, while creating high quality desirable content that students will want. The IPRAC is one of the mechanisms for providing input and feedback for long term plans.

In the short term, a program has been put together to assist with teacher motivation and ensure high quality content. This has been implemented as part of the IEN rollout and comprises a series of classes (16 hours total) for VTC that will be offered on a regular basis at no cost to originating teachers. It includes style and pedagogical practices and a number of components for advanced use of the technology as well as document cameras etc. There is also a four-hour class on how to use the equipment and manage a receiving classroom, this is brand

new and not yet available on the web. This work is being undertaken with the Certification Board for Teachers so that the course will meet some of the requirements for the online teachers certification endorsement. Those teachers that complete the origination training, who then also create a VTC Class, can be compensated for teaching the class in a VTC classroom.

LEN IN NORTHERN IDAHO

This item was covered under the Connectivity Update.

ANY OTHER BUSINESS

Greg commented that, in future, agenda items will be sought ahead of meetings. If there are too many agenda items, they will be prioritized by the Co-Chairs.

The meeting was adjourned at 3:00.

Respectfully submitted,

A handwritten signature in blue ink that reads "Sally Brevick". The signature is written in a cursive, flowing style.

Sally Brevick, Office of the CIO